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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Amit Bagga

503048-US-CIP (Bagga)

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EXAMINER

GYORFI, THOMAS A

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/815,191	Applicant(s) BAGGA ET AL.	
	Examiner Thomas Gyorfi	Art Unit 2135	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 21 April 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-27 remain for examination. The correspondence filed 4/21/08 amended claims 1, 21, and 27.

Response to Arguments

2. Applicant's arguments filed 4/21/08 have been fully considered but they are not persuasive. Applicant argues,

SecurityStats.com does not perform an Internet search, Rather, SecurityStats.com allows a user to enter a proposed password to assess the strength of the password SecurityStats.com explicitly states how the scoring works:

How scoring works: Your password will be checked for complexity against the *guidelines below* (See Suggestions). In addition, your password will also be checked against a *hacking dictionary* containing commonly used passwords and keystroke combinations (*italics added*)

Thus, SecurityStats.com does not disclose or suggest performing an Internet search that searches *contents of the Internet using a search engine tool*, as required by each independent claim, as amended.

Examiner disagrees, by observing that Applicant's argument fails to take into account that the hacking dictionary disclosed by SecurityStats.com would itself qualify as "contents of the Internet" under the broadest reasonable definition of the term. Although the SecurityStats.com reference is not specific in disclosing exactly where the hacking dictionary is located, one of ordinary skill in the art would plausibly infer that the hacking dictionary would be located on the same server as the SecurityStats.com webpage – which is an Internet site separate and distinct from the machine that initiated the query, such as the P-Synch system or the claimed invention – or alternatively, the hacking dictionary exists on a third party location elsewhere on the Internet (for which

Examiner has enclosed examples of publicly accessible hacking dictionaries made available for the express purpose of being queried to find common passwords). Thus, since SecurityStats.com searches contents of the Internet [albeit, very specific contents, in the form of entries from hacking dictionaries], thus SecurityStats.com also qualifies as a “search engine” under the broadest reasonable interpretation of the term. Although Applicant has suggested that the search engine may comprise any of the more commonly known search engines such as Google or Orkut, there is no limitation in the claim that would limit it to such.

To recap, Examiner maintains that (a) as P-Synch comprises the capacity to query other web sites as part of a password evaluation process, and (b) other web sites such as SecurityStats.com existed to be queried to evaluate passwords, wherein said query entails searching the contents of one or more hacking dictionaries located somewhere on the Internet in an attempt to find the potential password being queried, thus the combination of P-Synch and SecurityStats.com remains obvious and reads on the claims even as amended by Applicant.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over the P-synch version 6.2 software product, as evidenced by the “P-Synch Installation and

Configuration Guide" (hereinafter, "P-Synch"), in view of the web page "SecurityStats.com Password Strength Meter" (hereinafter, "SecurityStats.com").

Regarding claims 1, 21, and 27:

P-Synch discloses a method, apparatus, and article of manufacture for evaluating a password proposed by a user during an enrollment process (page 21, "5.3 Accounts on target systems") comprising: receiving said proposed password from said user (page 4, "3. Users select a new password..."); evaluating results from a table lookup relative to one or more predefined thresholds (page 4, "4. P-Synch checks the new password..."; cf. pages 124-126, but particularly those rules on page 126 as indicated); and rejecting said proposed password when said user is correlated with said proposed password if one or more of said predefined thresholds are exceeded by said results (*Ibid*). With respect to claim 21, P-synch is installed on a server (page 28, "1. Prepare a P-Synch server..."), which inherently possesses memory and a processor coupled to said memory.

P-Synch does not explicitly disclose performing an Internet search using a query containing one or more keywords derived from said proposed password. However, it is observed that P-synch, while already possessing a defined set of rules to measure a proposed password's strength, can nevertheless be extended by allowing an admin to add new rules via a plugin (page 127, section 10.19.1 "Adding new rules with a plugin program"). Furthermore, it is observed that P-Synch is essentially a web application, in that users interact with P-Synch via a web browser (page 6, "2.2.1 User Interfaces"; cf

Figure 10.3 on page 93) and P-Synch is capable of interacting with other web sites via a web interface (see the “HTTP apps” and “HTTPS apps” on page 20; cf. the sample scripts for interacting with a website on pages 327 & 328). Moreover, SecurityStats.com discloses a publicly available web site on the Internet that one may query to determine if a password is sufficiently strong (see page 1). Examiner takes Official Notice that the hacking dictionary employed by the SecurityStats.com is “contents of the Internet” for which the SecurityStats.com website searches [i.e. the site acts as a “search engine”] in order to fulfill its function. Additionally, SecurityStats.com recommends not using the actual proposed password but rather something similar [i.e. a keyword] to perform the query (page 1, 2nd paragraph). Thus the claim is obvious because all the claimed elements were known in the art, and one of ordinary skill in the art could have combined the elements as claimed by known methods (i.e. writing a plug-in for P-Synch to use P-Synch’s web interface to query SecurityStats.com as a new password strength rule), and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the invention.

Regarding claims 2, 3, and 22:

P-Synch further discloses wherein said one or more predefined correlation rules evaluate whether that said proposed password can be [qualitatively: the password is the username; quantitatively: the password is similar to the username] correlated with said user (page 126, as indicated).

Regarding claims 4, 6, 23, and 24:

P-Synch further discloses wherein said proposed password is comprised of a proposed answer and a proposed hint (the user Q&A profiles on pages 83 and 199-200; cf.). Although P-Synch has many rules by which one can correlate a proposed password to known weak passwords, P-Synch does not explicitly disclose determining whether the proposed answer can be correlated to/obtained from the proposed hint (i.e. the proposed password should not be similar to any of the personal information used in establishing one's personal profile – see also page 6, “2.2.2 Authentication System”). However, P-Synch discloses that one can augment the rules by which it determines the strength of proposed passwords (via external plug-ins, page 126; cf. sections 10.19.1 and 10.19.2 on pages 127-128) developed using techniques that one of ordinary skill in the art would have known (pages 576-584), said plug-ins allowing P-Synch to query additional sources for password strength rules (Ibid). Furthermore, SecurityStats.com teaches that it was common knowledge that various kinds of information already retained by P-Synch for a user's personal profile (the hints and answers), makes for very weak passwords (the “DONT'S” list on pages 1-3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to develop a plug-in for P-Synch, in accordance with the techniques explicitly disclosed for that exact purpose, that would have allowed it to query the user's personal profile to see if the proposed answer correlates to [e.g. is an anagram of], or can be obtained from [e.g. is an exact match for], the password hint. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by the disclosed

methods, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the instant invention.

Regarding claim 5:

P-Synch further discloses wherein said particular relation is selected from the group consisting essentially of self, family member, co-author, teammate, colleague, neighbor, community member, or household member (pages 83, 199, & 200).

Regarding claims 7 and 25:

P-Synch further discloses wherein said proposed password is an identifying number (e.g. PIN number, e.g. page 6, "2.2.2 Authentication Systems").

Regarding claims 8, 10, 11 and 26:

Although P-Synch discloses wherein said proposed password is an identifying number, it does not explicitly disclose rules to determine if the identifying number meets any of the following criteria: whether said identifying number identifies a person in a particular relationship to said user [claims 8 and 26], identifies a top N commercial entity [claim 10], or identifies said user [claim 11]. However, P-Synch maintains a database with each of those pieces of information: a number that identifies a person in a particular relationship to said user ("Family member phone number that is not your own", pages 83 and 200), a top N¹ commercial entity (radio station dial number, Ibid), and the user

¹ For purposes of the rejection of claim 10, it is assumed that N=1.

("Your SSN", Ibid). P-Synch further discloses that one can augment the rules by which it determines the strength of proposed passwords (via external plug-ins, page 126; cf. sections 10.19.1 and 10.19.2 on pages 127-128) developed using techniques that one of ordinary skill in the art would have known (pages 576-584), said plug-ins allowing P-Synch to query additional sources for password strength rules (Ibid). Furthermore, SecurityStats.com teaches that it was common knowledge that each piece of personal information known to be recorded by P-Synch makes for a very weak password (the "DONT'S" list on pages 1-3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to develop a plug-in for P-Synch, in accordance with the techniques explicitly disclosed for that exact purpose, that would have allowed it to query the user's personal profile to evaluate whether the identifying number meets any of the recited criteria in these claims. All the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by the known methods, and the combination would have yielded predictable results to one of ordinary skill in the art at the time of the instant invention.

Regarding claim 9:

P-Synch further discloses wherein said one or more pre-defined correlation rules evaluate whether said identifying number is a top N most commonly used identifying number (in the embodiment where the password is a PIN, the password history rules on pages 126 and 127).

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Regarding claims 12-14:

P-Synch further discloses wherein said identifying number is a portion of a telephone number, address, or social security number (pages 83 and 200).

Regarding claim 15:

P-Synch further discloses wherein said proposed password is a word (page 125, the dictionary rules).

Regarding claim 16:

P-Synch further discloses wherein said one or more predefined correlation rules evaluate whether a correlation between said word and said user exceeds a predefined threshold (e.g. the last two rules on page 125).

Regarding claim 17:

P-Synch further discloses wherein said correlation is determined by performing a meta-search (searching in accordance with rules found in one or more external plug-ins and/or the password history table, page 126).

Regarding claim 18:

P-Synch further discloses wherein said step of ensuring a correlation further comprises the step of performing a meta-search (Ibid).

Regarding claim 19:

P-Synch further discloses wherein said step of ensuring a correlation further comprises the step of performing a local proximity evaluation (e.g. the last two rules on page 125, and the variants of the username on page 126).

Regarding claim 20:

P-Synch further discloses wherein said step of ensuring a correlation further comprises the step of performing a number classification (the digits rules: page 125).

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- “SecurityFocus Presentation: Online commonly used password database” teaches that there existed a long felt need to have a publicly accessible common password database on the Internet that could be queried by anyone so as to determine if a password were weak (i.e. susceptible to being cracked), thus further suggesting the combination of P-Synch and SecurityStats.com above
- “Openwall Project” discloses the existence of a public hacking dictionary that appears to be similar to the hacking dictionary disclosed by SecurityStats.com, and which Examiner cites as supporting evidence for the Official Notice, as per MPEP 2144.03

- Excerpts from the Openwall password list (last updated 12/2/98), and a password list from www.phenoelit-us.org

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Gyorfi whose telephone number is (571)272-3849. The examiner can normally be reached on 8:30am - 5:00pm Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Vu can be reached on (571) 272-3859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TAG

5/23/08

/KIMYEN VU/

Supervisory Patent Examiner, Art Unit 2135